

# SVTbeam and ACNET

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# Which Data?

- Currently SVTbeam & Co. have the following output:
  - For barrel  $z=0,5$   
 $\{ x(z), y(z), s_x(z), s_y(z), s_{xy}(z), s_d(z), N_{\text{fit}}, N_{\text{tot}}, \text{err}, \text{fit\_q} \}$
- Soon to be added:  
 $x_{\text{beam}}(z=0), dx/dz, y_{\text{beam}}(z=0), dy/dz$

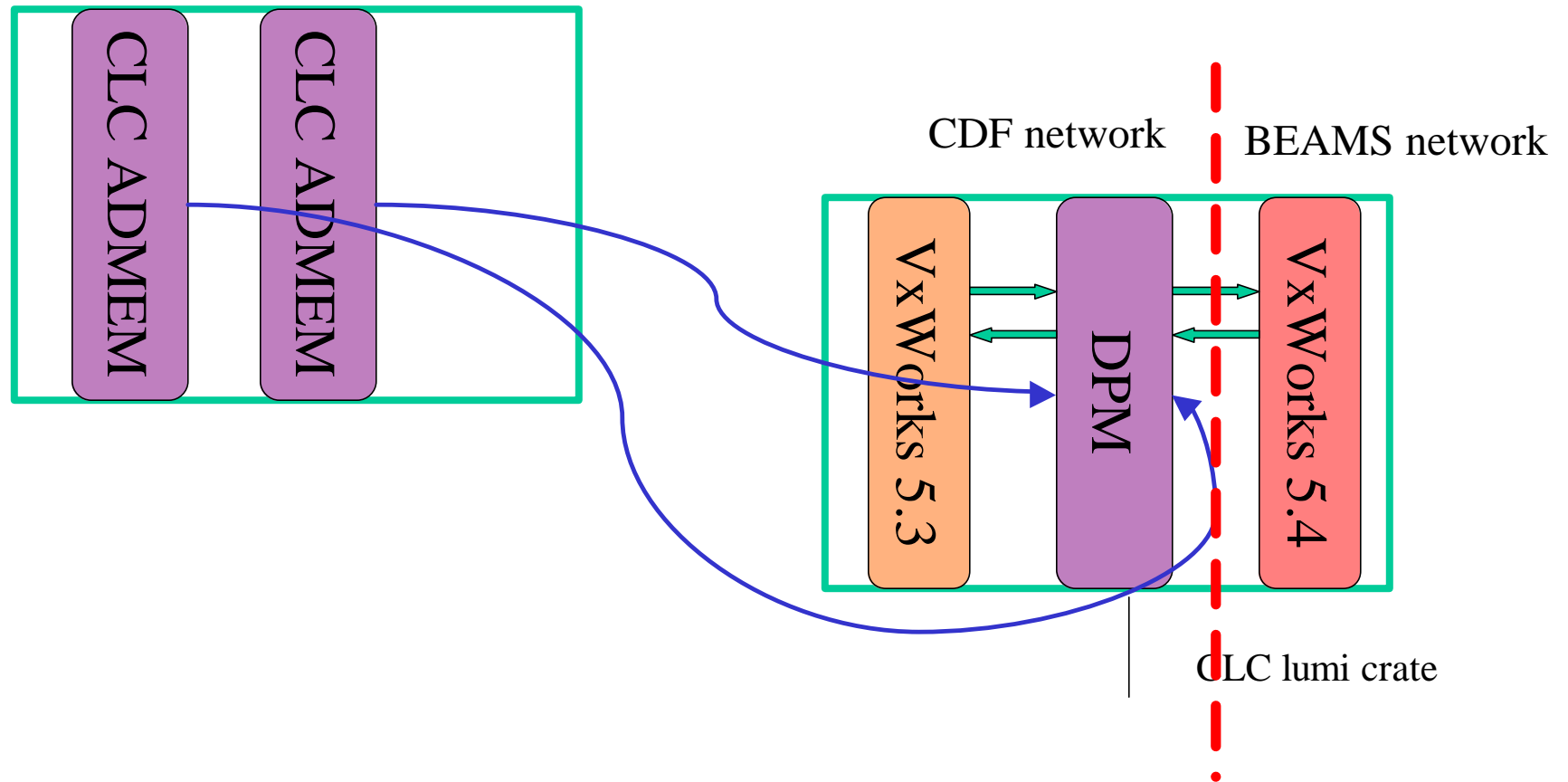
# Where does SVTbeam info go now?

- At the beginning of each new run and whenever a new fit become available:
  - SPYMON publish a smartsocket message with the above info
  - SPYMON update beam offset subtraction LUT in GB board
  - SVTSPYmon (root converter process) draw a sinus function on top of d vs phi plots
  - SVTSPYmon update a text based web page
- At each L2 accept the current beam position measurements is written in SVDD bank

# CLC experience with ACNET

- They provide luminosity/losses measurement
- A dedicated 6U crate in first floor has two CPU
  - The first does the calculation and write result in a DPM board.
  - The second read back this block and fill a memory location in the cpu
- On the second cpu the real ACNET process (from B.Kamper of Beam Division) get the results and send them to ACNET when requested.
- The second CPU is there because it has to run VxWorks 5.4! (Beam division  $\neq$  Computing division!)

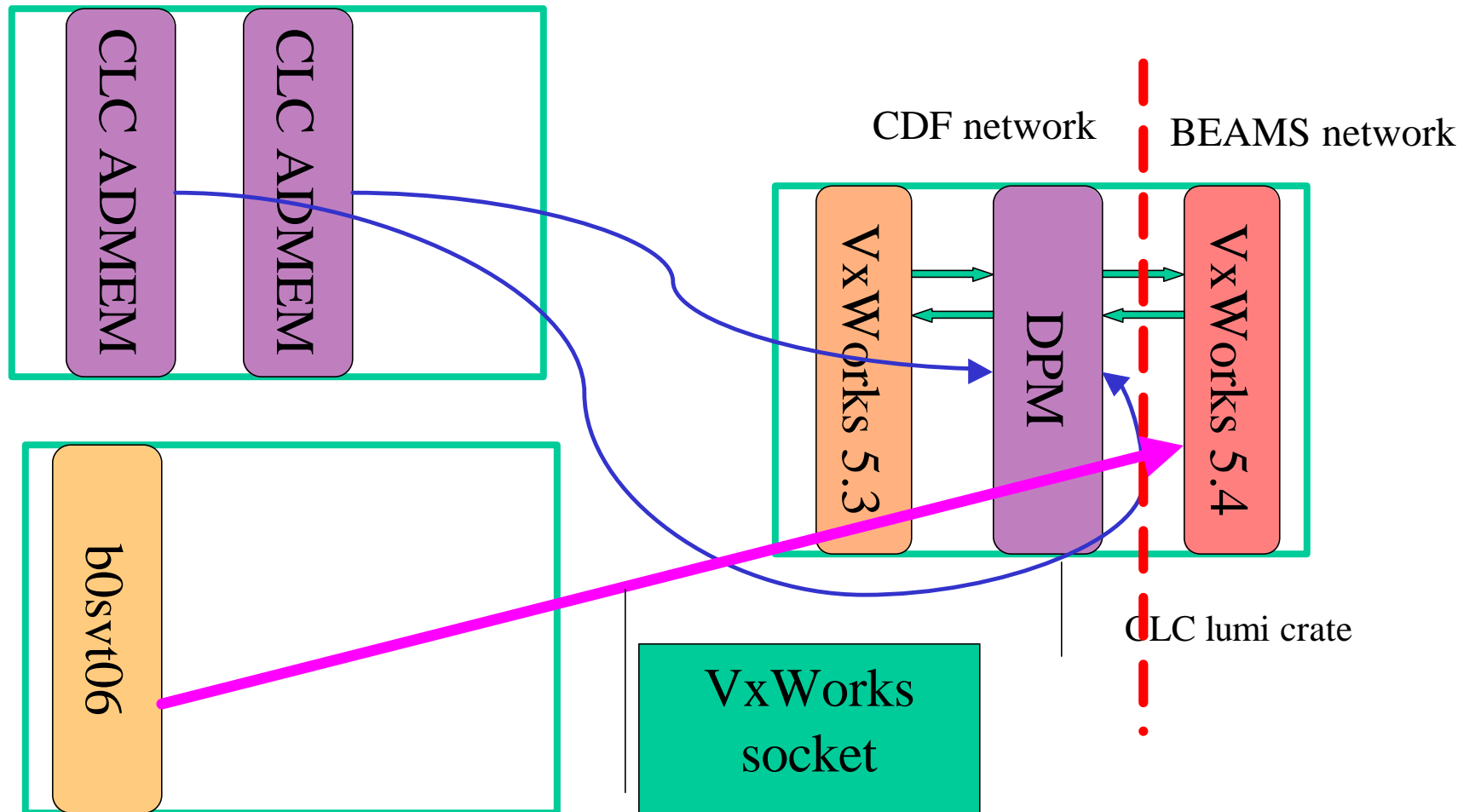
# CLC experience with ACNET



# SVT connection

- Have been talking with beam division expert (B.Kamper)
- Issue is to avoid having a new cpu allocated just for this task.
- The suggested solution has been to open a VxWorks socket from the CLC/ACNET cpu (possible problem with a firewall...)
- Other solutions may include using SmartSocket or an ad-hoc Unix program ( or maybe adding this to one of the existing spy-related program)
- J.Patrick is now head of the beam division control (might be useful!)

# SVT connection



# Other issues

- Don't know anything about Lumberjack datalogger yet !....
- Is there another database table needed for storing measurement of beam position from the last run?

SVTBeam													
<i>Time</i>	<i>Run</i>	<i>X0</i>	<i>Y0</i>	<i>X1</i>	<i>Y1</i>	<i>X2</i>	<i>Y2</i>	<i>X3</i>	<i>Y3</i>	<i>X4</i>	<i>Y4</i>	<i>X5</i>	<i>y5</i>

- Who is going to write this table? RC ? A dedicated consumer (aka D-mode calibration)? Something else?